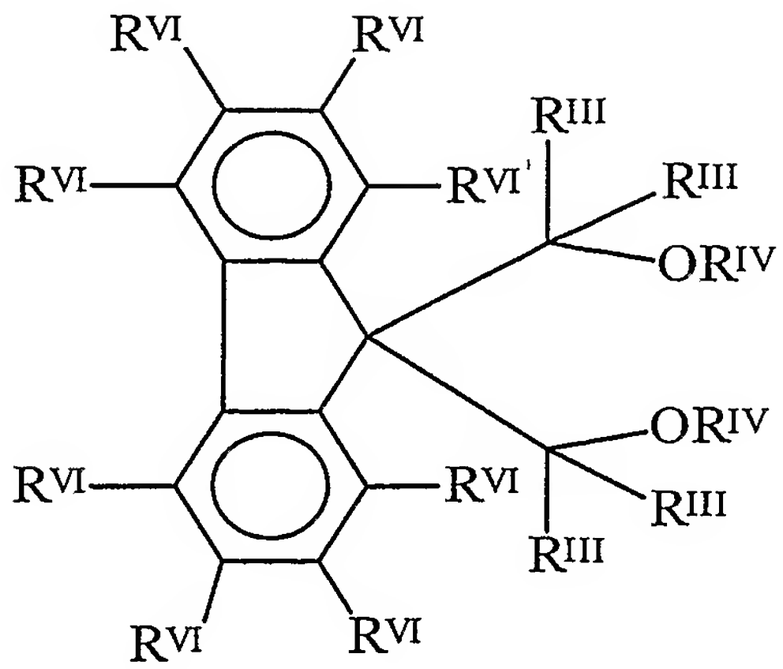
CLAIMS

1. Lewis base adducts comprising a compound of formula $MgCl_n(OR)_{2-n}$, and an aprotic Lewis base (LB) that are in molar ratios to each other defined by the formula $MgCl_n(OR)_2 \cdot {}_nLB_p$ in which n is from 0.1 to 1.9, p is higher than 0.4, and R is a C1-C15 hydrocarbon group.
2. The adducts according to claim 1 in which the LB is selected from esters or ethers.
3. The adducts according to claim 2 in which the ethers are cyclic ethers having 3-5 carbon atoms.
4. The adducts according to claim 3 in which the ether is tetrahydrofurane.
5. The adducts according to claim 1 in which p is higher than 0.45.
6. The adducts according to claim 1 in which n ranges from 0.4 to 1.6.
7. Process for the preparation of the adducts of claim 1 comprising contacting organometallic compounds of formula Cl_mMgR_{2-m}, where m is from 0 to 2, and R is a C1-C15 hydrocarbon group, with a OR source in the presence of an aprotic Lewis base (LB).
8. Process according to claim 8 in which the OR source is selected from ROH alcohols and orthosilicic acid esters.
9. Process according to claims 8 in which the formation of Cl_mMgR_{2-m} and the further exchange with the OR source takes place in one single step.
10. Process for the preparation of the adducts of claim 1 comprising reacting mixtures of $MgCl_2$ and $MgOR_2$ in the presence of the LB compound.
11. Catalyst components obtained by contacting an adduct according to anyone of claims 1-10 with compounds of transition metals belonging to one of the groups 4 to 6 of the Periodic Table of Elements (new notation).
12. The catalyst components according to claim 11 in which the transition metal compound is selected from titanium compounds of formula $Ti(OR)_nX_{y-n}$ in which n is comprised between 0 and y; y is the valence of titanium; X is halogen and R is an alkyl radical having 1-10 carbon atoms or a COR group.
13. The catalyst components according to claim 11 further containing an electron donor selected from esters, ethers, amines, and ketones.
14. The catalyst component according to claim 18 in which the electron donor is selected

from 1,3-diethers of formula (III)



(III)

where the R^{VI} radicals equal or different are hydrogen; halogens, preferably Cl and F;- C_1-C_{20} alkyl radicals, linear or branched; C_3-C_{20} cycloalkyl, C_6-C_{20} aryl, C_7-C_{20} alkylaryl and C_7-C_{20} aralkyl radicals, optionally containing one or more heteroatoms selected from the group consisting of N, 0, S, P, Si and halogens, in particular Cl and F, as substitutes for carbon or hydrogen atoms, or both; the radicals R^{III} and R^{IV} are as defined in claim 23.

15. A catalyst system for the polymerization of alpha-olefins CH_2=CHR, wherein R is hydrogen or a hydrocarbon radical having 1-12 carbon atoms, obtained by contacting a catalyst component according to anyone of the claims 11-14 with one or more organoaluminum compounds.
16. The catalyst system according to claim 15 further containing an external electron donor compound.
17. Process for the polymerization of olefins carried out in the presence of a catalyst according to anyone of claims 15-16.